Applicant: Shackleford et al. Dekt. No.: 100110346-1

Issued : n/a

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In the claims:

Please amend claim 6, 12, and 13 as follows:

6. (Currently Amended) A system to reduce a search space for determining viable cellular automata based random number generator (CA-based RNG) [(CA-based RNGs)], comprising:

a truth-table-counting-module counting number of 1s and 0s of outputs of a truth table for a candidate CA-based RNG, said truth-table-counting module also counting number of 1s and 0s of inputs of said truth table for said candidate CA-based RNG; and

a prescreening-module accepting or rejecting said candidate CA-based RNG based on an output or outputs of said truth-table-counting module.

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12. (Currently Amended) A computer readable medium on which is embedded computer

software comprising a set of instructions for performing a method to reduce a search space for

determining viable cellular automata based random number generator (CA-based RNG) [(CA-

based RNGs)], said method comprising:

counting number of 1s and 0s of outputs of a truth table for a candidate CA-based RNG;

counting number of 1s and 0s of inputs of said truth table for said candidate CA-based RNG; and

accepting or rejecting said candidate CA-based RNG based on results of said counting

steps.

13.(Currently Amended) The computer readable medium of claim 12, wherein in said method

[[(200)]], said step of accepting or rejecting said candidate CA-based RNG comprises:

accepting said candidate CA-based RNG in response to all of the following conditions

being met:

a difference of counts of 1s and 0s in said outputs of said truth table is less than or

equal to a predetermined output difference threshold;

a difference of counts of 1s and 0s in said inputs of said truth table generating is

for output is less than or equal to a predetermined is input difference threshold; and